Appl. No. 10/773,660
Amdt. dated
Reply to Office Action of 12/13/2007

PATENT
Docket: 030351

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A base station comprising:

a transceiver subsystem; and

a processing subsystem; ~~wherein the processing subsystem is~~ configured to receive a request for grant ~~service~~ including an identification of a specific service class from a mobile station, the specific service class being one of a set of available service classes, ~~and~~ to make a determination whether or not to issue a grant to the mobile station in response to the request for grant, ~~and if the processing subsystem makes~~ to send a grant for the specific service class to the mobile station if a determination is made to issue the grant, ~~the processing subsystem is configured to identify in the issued grant a specific service class for which the grant is issued, the specific service class associated with data to be~~ and to receive data for the specific service class transmitted according to the grant on a reverse link from the mobile station to the base station.

2. (Original) The base station of claim 1, wherein the processing subsystem is configured to make the determination independently of a base station controller.

3. (Original) The base station of claim 1, wherein the processing subsystem is configured to make the determination independently of one or more additional base stations.

4. (Currently amended) The base station of claim 1, wherein the determination is made at ~~the~~ a medium access control layer.

5. (Original) The base station of claim 1, wherein if the processing subsystem determines that the grant should be issued to the mobile station, the base station is configured to issue the grant.

6. (Currently amended) The base station of claim 1 ~~5~~, wherein the processing subsystem is configured to identify the mobile station in the grant.

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7. (Currently amended) The base station of claim 1 5, wherein the processing subsystem is configured to issue the grant as an individual grant.

8. (Currently amended) The base station of claim 7, wherein the processing subsystem is configured to identify the mobile station in the individual grant a specific service class for which the individual grant is issued.

9. (Currently amended) The base station of claim 1 5, wherein the processing subsystem is configured to issue the grant as a common grant.

10. (Currently amended) The base station of claim 9, wherein the processing subsystem is configured to identify in the common grant a the specific service class for which the common grant is issued.

11. (Original) The base station of claim 5, wherein the processing subsystem is configured to issue at least one individual grant and at least one common grant.

12. (Currently amended) A mobile station comprising:

a transceiver subsystem; and

a processing subsystem coupled to the transceiver subsystem and configured to process information received from the transceiver subsystem, and to generate information to be transmitted by the transceiver subsystem; wherein the processing subsystem is configured, to generate a request for transmission to a base station, the request for transmission identifying a specific class of service among a set of available classes of service, to identify receive a corresponding grant received from the base station, and to control the transceiver subsystem to transmit data for the specific class of service according to the received grant on a reverse link from the mobile station to the base station; and

wherein the request for transmission to the base station specifies one of a set of available classes of service, the one available class of service associated with data to be transmitted on a reverse link from the mobile station to the base station.

13. (Original) The mobile station of claim 12, further comprising one or more buffers, wherein each buffer is associated with one of the classes of service.

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14. (Currently amended) The mobile station of claim 13, wherein the processing subsystem is configured to monitor the buffers and, for each buffer, to generate a ~~transmission~~ request <u>for transmission</u> if a threshold amount of data is detected in the buffer.

15. (Currently amended) The mobile station of claim 14, wherein the request <u>for transmission for a buffer</u> specifies the class of service associated with the buffer and the amount of data in the buffer.

16. (Canceled)

17. (Currently amended) The mobile station of claim 12, wherein the processing subsystem is configured to identify a maximum supportable ~~T/P~~ <u>traffic-to-pilot</u> ratio in the request.

18. (Currently amended) The mobile station of claim 17, wherein the processing subsystem is configured to generate feedback while transmitting under ~~a~~ <u>the</u> grant, wherein the feedback indicates changes in the maximum supportable ~~T/P~~ <u>traffic-to-pilot</u> ratio.

19. (Currently amended) The mobile station of claim 12, wherein the processing subsystem is configured to generate one or more additional requests ~~for service~~ for transmission to the base station if no grant is received in response to a previous request <u>for transmission</u>.

20. (Currently amended) The mobile station of claim 12, wherein if no grant is received from the base station in response to ~~a~~ <u>the</u> request <u>for transmission</u>, the processing subsystem is configured to autonomously transmit data to the base station.

21 - 34. (Canceled)

35. (Currently amended) A method for a base station comprising:

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receiving a request for a grant including an identification of a specific service class from a mobile station at a the base station, the specific service class being one of a set of available service classes;

processing the request at the base station; and

determining at the base station whether to issue the a grant to the mobile station in response to the request for grant; and

sending a grant for the specific service class to the mobile station if a determination is made to issue the grant is issued to the mobile station, identifying in the issued grant a specific service class for which the grant is issued, the specific service class associated with; and

receiving data for the specific service class to be transmitted according to the grant on a reverse link from the mobile station to the base station.

36. (Original) The method of claim 35, further comprising issuing the grant if the base station determines that the grant should be issued.

37. (Currently amended) The method of claim 35 36, further comprising issuing the grant as an individual grant.

38. (Currently amended) The method of claim 37, further comprising identifying a the mobile station in the grant.

39. (Currently amended) The method of claim 38, further comprising identifying a the specific service class in the grant.

40. (Currently amended) The method of claim 35 36, further comprising issuing the grant as a common grant.

41. (Currently amended) The method of claim 40, further comprising identifying a the specific service class in the grant.

42. (Original) The method of claim 36, further comprising issuing at least one individual grant and at least one common grant.

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43. (Currently amended) The method of claim 35, wherein the determining whether to issue the ~~service~~ grant is performed without communicating with a base station controller.

44. (Currently amended) The method of claim 35 ~~43~~, wherein the determining whether to issue the ~~service~~ grant is performed without communicating with one or more additional base stations.

45. (Currently amended) The method of claim 35, wherein the determining whether to issue the ~~service~~ grant is performed at a medium access control layer.

46. (Currently amended) The method of claim 35, further comprising:

transmitting ~~a~~ the request for ~~a~~ grant from ~~a~~ the mobile station to the base station, ~~wherein the request specifies one of a set of available classes of service~~;

if a grant corresponding to the request is issued, transmitting data in the ~~specified~~ specific service class according to the received grant; and

if no grant corresponding to the request is issued, either transmitting data in the ~~specified~~ specific service class in an autonomous mode, or transmitting a subsequent request, or both.

47. (Currently amended) The method of claim 46, further comprising monitoring one or more buffers, wherein each buffer is associated with one of the service classes ~~of service~~ and, for each buffer, generating a corresponding request for grant if a threshold amount of data is detected in the buffer.

48. (Currently amended) The method of claim 47, further comprising specifying in the request for a buffer the class of service associated with the buffer and the amount of data in the buffer.

49. (Currently amended) The method of claim 46 ~~47~~, further comprising specifying in the request for grant a maximum supportable ~~T/P~~ traffic-to-pilot ratio.

50. (Currently amended) The method of claim 49, further comprising generating feedback while transmitting under a the grant, wherein the feedback indicates changes in the maximum supportable T/P traffic-to-pilot ratio.

51. (Canceled)

52. (Currently amended) A method for a mobile station comprising

transmitting a request for a grant from a the mobile station to a base station, wherein the request specifies one of identifies a specific class of service among a set of available classes of service; and

if a grant corresponding to the request is issued by the base station, transmitting data for the specific class of service on a reverse link from the mobile station to the base station in the specified class according to the received grant.

53. (Original) The method of claim 52, further comprising monitoring one or more buffers, wherein each buffer is associated with one of the classes of service and, for each buffer, generating a corresponding request if a threshold amount of data is detected in the buffer.

54. (Currently amended) The method of claim 53, further comprising specifying in the request for a buffer the class of service associated with the buffer and the amount of data in the buffer.

55. (Currently amended) The method of claim 52 53, further comprising specifying in the request a maximum supportable T/P traffic-to-pilot ratio.

56. (Currently amended) The method of claim 55, further comprising generating feedback while transmitting under a the grant, wherein the feedback indicates changes in the maximum supportable T/P traffic-to-pilot ratio.

57. (Canceled)

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